

Notice of Allowability

Application No.

10/730,172

Applicant(s)

CYWIN ET AL.

Examiner

Art Unit

Evelyn Huang

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 4-4-2005.
2. ☒ The allowed claim(s) is/are 24-28.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Evelyn Huang
Primary Examiner
Art Unit: 1625

S.O.-G

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Dow on 5-27-2005. During the interview, the examiner suggested amending claims 24-28 to better define these claims to place the application in conditions for allowance. The examiner suggested inserting '-CH₃' in the definition of claim 24 to provide antecedent basis for dependent claim 25, reciting the definition of 'isomers' in claims 24, 27, 28 and deleting the proviso in the definitions of R4 and R5 in claims 25, 26 since it has no antecedent basis in the recited definitions of R4 and R5 in these claims.

The application has been amended as follows:

a. Claim 24,

- Line 1, delete 'general' from 'general formula (I)'.
- Definition of R1, (I), definition of R', after 'pyridyl', insert – or -CH₃--.
- Definition of R7, before 'C₁₋₆alkyl', insert – or --.
- Last two lines, replace 'or pharmaceutically acceptable salts
pharmaceutically acceptable salts, isomers or tautomers thereof' with
-- or a pharmaceutically acceptable salt, racemate, racemic mixture, single enantiomer, diastereomeric mixture or individual diastereomer thereof--.

b. Claim 25,

- Line 1, delete 'general' from 'general formula (I)'.
- Definitions of R4 and R5, delete 'provided that R4 or R5 are not methyl or benzyl and R4 and R5 are not both H'.
- Definition of R7, before 'C₁₋₆alkyl', insert – or --.

Art Unit: 1625

- c. Claim 26,
- Line 1, delete 'general' from 'general formula (I)'.
 - Definitions of R4 and R5, delete 'provided that R4 or R5 are not methyl or benzyl and R4 and R5 are not both H'.
 - Definition of R7, before 'C₁₋₆alkyl', insert -- or --.
- d. Claim 27, last line, replace 'or pharmaceutically acceptable salts, isomers or tautomers thereof' with -- or a pharmaceutically acceptable salt, racemate, racemic mixture, single enantiomer, diastereomeric mixture or individual diastereomer thereof--.
- e. Claim 28, last line, replace 'or pharmaceutically acceptable salts, isomers or tautomers thereof' with -- or a pharmaceutically acceptable salt, racemate, racemic mixture, single enantiomer, diastereomeric mixture or individual diastereomer thereof--.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

Claims 24-28 are allowed.

The amendment has obviated the rejection under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The cancellation has rendered moot the objection to Claim 17 as being a substantial duplicate of claim 1.

The cancellation of claims 1-23 has rendered moot the rejection under 35 U.S.C. 102(b) as being anticipated by Kadushkin (Khimiko-Farmatsevticheskii Zhurnal (1992), 26(11-12): 62-6), the rejection under 35 U.S.C. 102(b) as being anticipated by Wagner (Pharmazie (1990) 45: 102-109, PTO-1449, the rejection under 35 U.S.C. 102(b) as being anticipated by Attaby (Phosphorus, Sulfur, and Silicone (1999), 149: 49-64, PTO-1449), the rejection under 35 U.S.C. 102(b) as being anticipated by Ghorab (Phosphorus, Sulfur, and Silicone (1998), 134/135: 447-462, PTO-1449), the rejection under 35 U.S.C. 102(b) as being anticipated by Kaigorodova

Art Unit: 1625

(Chemistry of Heterocyclic Compounds (1996), 32(10): 1234-1238, PTO-1449), the rejection under 35 U.S.C. 102(b) as being anticipated by Sharanin (Zhurnal Organicheskoi Khimii (1996), 32(8): 1251-1255).

The cancellation of claims 1-23 has rendered moot the rejection under 35 U.S.C. 103(a) as being unpatentable over Arendsen (WO 00/75145, PTO-1449), and the rejection under 35 U.S.C. 103(a) as being unpatentable over Wagner (PTO-1449).

The timely filed terminal disclaimer has obviated the provisional rejection under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6, 8, 14 of copending Application No. 10/453175.

Kadushkin's compound as a hydrogen, whereas the instant has a heterocyclyl as R2. Motivation to modify Kadushkin's compound to arrive at the instant is lacking.

While Arendsen generically teaches that R2 may be heterocyclyl, an example wherein R2 is heterocyclyl has not been described. Furthermore, the closest example compound (page 288, line 145) is a thieno[2, 3-c]pyridine, whereas the instant is a thieno[2, 3-b]pyridine. Motivation to modify Arendsen's compound via multiple changes to arrive at the instant invention is lacking.

Wagner's compound has a methyl, whereas the instant has a heterocyclyl as R2. Motivation to modify Wagner's compound to arrive at the instant is lacking.

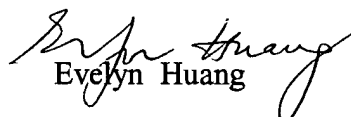
3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 571-272-0686. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Evelyn Huang

Primary Examiner

Art Unit 1625
